

# How to Keep Your Computer Systems Safe from Summer Storm

## Damage

By Joshua Feinberg

How to Keep Your Computer Systems Safe from Summer Storm Damage

Joshua Feinberg  
customersvc@smallbiztechtalk.com

"Tips", courtesy of Joshua Feinberg's Sm <http://www.smallbiztechtalk.com>

How to Keep Your Computer Systems Safe from Summer Storm Damage

Seven Simple Strategies to avoid the wrath of PC electrocution

Joshua Feinberg, Editor of Smallbiztechtalk.com <http://www.smallbiztechtalk.com>

Copyright (C) 2001, KISTech Communications Corporation

Are your computers ready to weather the summer storms and the added strain of brownouts, blackouts, surges, and sags?

If you answered "Not Sure" or "No", you're certainly not alone. In most small offices, unless you have an in-house computer support person, or a similar arrangement with a local consultant, your computer and phone systems may be a lot more vulnerable than you realize.

The hot summer months, with increased power consumption, force utility companies into a 7x24 juggling act. When left unchecked, these utility power fluctuations can really wreak havoc on your PCs and telephones, as well as any other sensitive electronic devices in your office.

At Smallbiztechtalk.com, we have seven simple strategies you can follow this summer to dramatically reduce your risk of summer storm damage.

-----  
**Executive Summary**

Make sure every piece of sensitive electronic equipment in your office has some type of surge suppression.

Don't overlook your data lines.

Install battery backup units on computers, phone systems, and peripheral devices.

Test your battery backup unit and monitor the log files.

Don't piggyback your surge protectors or battery backup units to each other.

Watch out for the Site Wiring Fault light.

Check your interface and software compatibility, before you buy.

-----

1. Make sure every piece of sensitive electronic equipment in your office has some type of surge suppression. Don't be fooled by power strips in the \$5-\$10 U.S. price range. Expect to spend a minimum of \$15-\$35 U.S. for a business-grade surge suppressor from one of the leading manufacturers of power protection devices.

We've always been very happy with the reliability, variety, and value of American Power Conversion's (<http://www.apcc.com>) products; however, there are at least three or four other major manufacturers of similar surge protector and battery backup products.

Most business-grade surge suppressors, and battery backup units, all include equipment protection warranties - the equivalent of the vendor putting their money where their mouth is.

For example, the APC Personal SurgeArrest (Part Number: Per7T in North America) retails for \$29.99 U.S. and includes a \$2,500 U.S. lifetime equipment protection policy. This model is often used for workgroup laser printers, telephones, cell phone chargers, and fax machines.

Basic business-grade surge protectors like the APC Personal SurgeArrest also include a "Protection working indicator".

A few words about notebooks for the road warriors among us: Most top power protection vendors make inexpensive, portable-sized surge protectors, with data line protection, especially for laptops. Just like the famous American Express slogan, "don't leave home without it."

2. Don't overlook your data lines. In addition to sneaking in through your electrical outlets, power surges and spikes can go right from telephone and cable TV circuits to your network card or modem, and literally "fry" the innards of your PC. (Yes, we've seen this happen many times and it's not pretty.)

Be sure your surge protector has data line protection, or purchase a standalone data line surge protector separately. Just as important, make sure you read the included instructions and actually use the data line protection properly.

Also don't overlook the many types of data circuits you may have coming into your office, beyond the basic analog telephone lines. Finally, don't forget data line protection for more advanced telecommunication circuits such as ISDN, xDSL, Frame Relay, Fractional T1/T3, and cable modem.

3. Install battery backup units on computers, phone systems, and peripheral devices. While a basic surge suppressor will protect your office equipment from getting "burned" by high-voltage current,

invest in a battery backup unit for each of your PCs, file servers, external modems, network hubs/routers/switches, and phone system chassis.

Battery backup units, commonly known as uninterruptible power supplies (UPS units), provide continuous power during brownouts and blackouts, so you can close out any open files that you're working on and shut down your computer properly.

If you've ever heard the horrible screaming sound a person makes when their PC "crashes", or loses power suddenly, with a half-dozen applications running and hours of not-yet-saved data, you'll understand why a UPS is mandatory for any office with valuable information on their PC's hard drives.

UPS units come in a variety of different price ranges. The most important part of selecting a UPS is to make sure it's "sized" right for your needs. Most of the leading power protection vendors have product selection tools on their web sites to make sure you buy the proper model to fit your hardware, run-time requirements, and budget.

Battery backup units run the gamut from very basic entry-level units (generally \$100-\$200 U.S.), perfect for your desktop PC, to mid-range units (generally \$400-\$800 U.S.), designed for small file servers, to high-end products, with hours of run-time, targeted at corporate data centers.

4. Test your battery backup unit and monitor the log files. Test regularly and test often. Most battery backup units, especially the ones meant for servers, include some type of serial or USB interface that connects your UPS unit to your PC. This interface is what allows for advanced functions such as unattended shutdowns of your computer during extended blackouts, scheduled self-testing, as well as the logging of the time, date, duration and magnitude of a power fluctuation.

To get a pulse on just how "good" or "bad" your utility power is, check your UPS software program's log files. Even more importantly, make it a point to do a "pull the plug" test a few times a year. This involves literally, pulling the plug from your UPS out of your electrical socket, watching your watch, and making sure your UPS handles like you think it's "supposed to" during a blackout.

5. Don't piggyback your surge protectors or battery backup units to each other. Just a reminder. You're defeating the purpose of expensive surge protectors and battery backup units when they're daisy-chained to other less capable devices or extension cords. "Piggybacking" also causes a major safety hazard. All in all, a big "no-no".

6. Watch out for the Site Wiring Fault light. Most business grade surge suppressors, and nearly all battery backup units, include an LED indicator for site wiring faults.

A site wiring fault usually means that your third wire on the standard North American electrical outlet is not properly connected to ground. While this can be a hazard to your hardware and system reliability, it can also be a safety hazard.

Do not pass go --- do not collect \$200. Call a licensed electrician and get this checked out ASAP. While we're on this subject, never try to force a three pronged surge suppressor or UPS power cord into a two-pronged outlet.

7. Check your interface and software compatibility, before you buy. Finally, if you have PCs or file servers that are left unattended while powered on (generally most offices do), it's crucial to have automated shutdown capabilities to prevent a "hard crash", the equivalent to pulling the plug out from your wall outlet while dozens of files are open.

If you're purchasing a mid-range battery backup unit for your desktop PC or server and you're planning to use the intelligent serial or USB interface for monitoring and unattended shutdown functions, be sure to do your homework. Make sure you have an available serial or USB port on your PC or server, and that the software is compatible with, and preferably certified for, your desired operating system.

Copyright (C) 2001, KISTech Communications Corporation

You have permission to reprint this article from "Tips" in your newspaper, magazine, trade publication, e-zine or web site as long as you use the article in its entirety, without editing and you include the following information:

Copyright (C) 2001, KISTech Communications Corporation, Used by Permission

AND

Joshua Feinberg (mailto:joshua@smallbiztechtalk.com) is an internationally recognized small business technology expert, consultant, columnist, author, keynote speaker, and trainer. He is a published Microsoft Press, an acclaimed columnist on the Microsoft Direct Access web site, and editor of his own recently launched bi-weekly e-zine, "Tips", courtesy of Joshua Feinberg's Small Biz Tech Talk (<http://www.smallbiztechtalk.com>). Sign up for this FREE bi-weekly e-zine by visiting <http://www.smallbiztechtalk.com> and receive two FREE mini-reports by e-mail.

ALSO

Send us a copy of the publication where the article reprint has appeared. Contact us at <mailto:customersvc@smallbiztechtalk.com> for information on how to send us a copy of your publication. Any deviation from the above is a violation of U.S. Federal and International Copyright. ISSN# 1535-0428.

[Get-Articles.com : 1000's of reprintable business and internet marketing-related articles.](#)

[Submit your article for reprint.](#)